II. INTERSECTION OPERATION

- 1. The intersection is to operate in a NEMA six-phase, semi-actuated mode, with the MD 140 (Reisterstown Rd) approaches running concurrently. The northbound and southbound approachs of MD 140 (Reisterstown Rd) will continue to operate as normal. The Countdown pedestrian phase with audible pushbutton actuation shall be provided across the north leg of MD 140 (Reisterstown Rd) at High Falcon Road. The side street approach shall continue to operate as normal.
- A full-traffic-actuated, existing eight-phase controller with a proposed 2-wire Central Control Unit and all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.
- SHA signal shop shall install APS central control unit into controller cabinet.
 The Contractor shall deliver the Central Control Unit and audible pushbuttons to the SHA Signal Shop for testing and programming.

III. SPECIAL NOTES

- 1. The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7652 seventy-two hours in advance of intended work.
- 3. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.
- 4. APS will function as follows:
- FOR MD 140 (REISTERSTOWN RD)
 - a. When pedestrian locates and presses pushbutton for an extended time, the pushbutton unit will be "Wait to cross Reisterstown at High Falcon"
 - When WALK phase begins, the message will be a rapid tick which will last for the duration of the WALK phase.

The contact persons for District #4 are as follows:

Ms. Erin Kuhn

Assistant District Engineer - Traffic Phone: (410) 321-2781

Mr. Richard L. Daff, Sr. Chief, Traffic Operations Division Phone: (410) 787-7630

Mr. Andre Futrell

Phone: (410) 321-2841

Assistant District Engineer - Maintenance Phone: (410) 321-2761

Mr. Ed Rodenhizer Chief, Traffic Signal Operations 410-787-7652

Mr. Mike Pasquaiello Assistant District Engineer - Utility

Mr. Sonny Bailey Chief Sign Shop 410-787-7670

EQUIPMENT LIST

EQUIPMENT TO BE SUPPLIED BY S.H.A..

ITEM NO.

DESCRIPTION

Sheet aluminum signs to consist of:

(pole mount)

Pedestrian education R10-3(1) (Note: Sign to read "PUSHBUTTON TO CROSS REISTERSTOWN ROAD")

QUANTITY

2 SF

2 EA

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

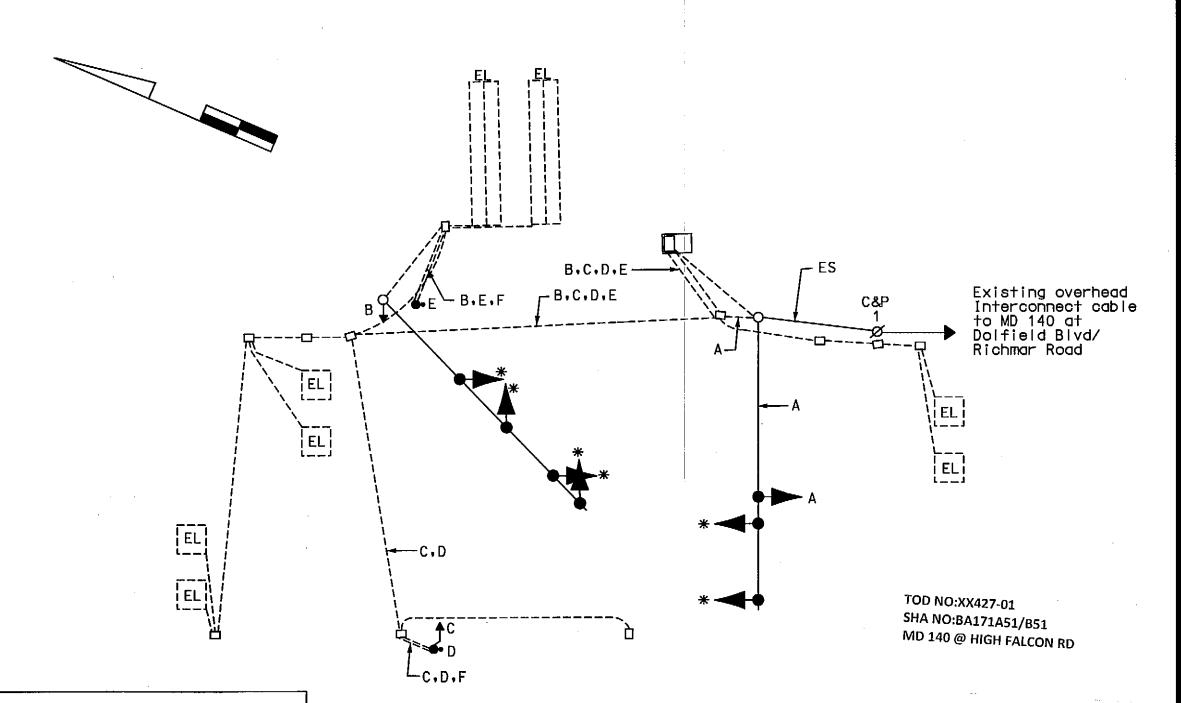
ITEM NO.	DESCRIPTION	QUANTITY		
1001	Maintenance of traffic per assignment.	1	EA	
2002	Test Pit Excavation	2	C.Y.	
5001	Removal of existing permanent pavement line markings any width	250	L.F.	
5005	12" white preformed thermoplastic pavement marking lines.	160	L.F.	
5006	24" white preformed thermoplastic pavement marking lines.	45	L.F.	
6001	Standard type A combination curb and gutter 12" gutter pan 8" depth.	120	L.F.	
6002	5" concrete sidewalk.	250	S.F.	
8001	12" LED signal head section.	21	EA	
8002	2 wire Central Control unit	1	EA	
8006	Adjust existing handhole to grade.	1 .	EA	
8007	Audible/tactile pedestrian pushbutton station & signs.	2	EA	
8008	Breakaway pedestal pole (ANY SIZE)	2	EA	
8010	LED 16" countdown pedestrian signal head.	2	EA	
8013	Remove and dispose of	1	EA	
8018	Schedule 80 rigid PVC conduit up to 4" — trenched.	100	L.F.	
8019	Detectable warning surface for curb ramps	40	S.F.	
8023	Electrical cable – 2 conductor (No. 14 AWG).	600	L.F.	
8025	Electrical cable – 5 conductor (No. 14 AWG).	600	L.F.	
8026	Electrical cable – 7 conductor (No. 14 AWG).	100	L.F.	

EQUIPMENT TO BE REMOVED All removed signal materials are to become the property of the contractor.

PHASE CHART

	PHASE 2 & 6	G	G	G	G	G	R	R	DW	DW	⊥	
	2 & 6 CHANGE	Y	Y	Y	Y	Υ	R	R	DW	DW	·	
	PHASE 4	R	R	R	R	, R	G	G	DW	DW		⊢
,	4 CHANGE	R	R-	R	R	R	Y	Y	DW	ÐW	-	
	PHASE 4 ALT	R	R	R	R	R	G	G	WK	WK	†	<u>-</u>
	PED CLEAR / COUNTDOWN	R	R	R	R	R	G	G	FL/DW	FL/DW		
	4 ALT CHANGE	R	R	R ·	R	R	Y	Y	DW	DW	⊣	
	FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	+	

WIRING DIAGRAM



WIRING KEY

- A-7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
- 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
- 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)
- F STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- * USE EXISTING WIRING
- EL EXISTING LOOP
- ES EXISTING OVERHEAD SERVICE



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

MD 140 (REISTERSTOWN ROAD) AND HIGH FALCON ROAD

OWINGS MILLS, MARYLAND

REVISION "E" STREET TRAFFIC STUDIES, LTD.

CONTRACT NO. XX4275185 SCALE NONE DATE 4/8/09 DESIGNED BY JAMES ALLEN Jr. COUNTY BALTIMORE

DRAWN BY JAMES ALLEN Jr. CHECKED BY F.A.P. NO.

TOD NO.

TS NO. 367E DRAWING NO. 2 OF 2

PLOTTED: \$DATETIME\$
FILE: \$FILE\$

5714g1.dgn

400 Crain Hwy, N.W. Glen Burnie, MD 2/06/

Ph (410) 590-5500 Fax (410) 590-6637

GENERAL INFORMATION SHEET

LOGMILE 03014007.18

SHEET NO.